

### **REMARKS**

Applicant respectfully requests reconsideration. Claims 27-54, 56, 60, 63 and 64 were pending in this application. New claims 65-102 are being added. Claim 56 is being amended. No new matter is being added. Accordingly, claims 27-54, 56, 60, 63 and 64-102 are pending in the application with claims 27, 56, 75, 84 and 93 being independent.

#### **Examiner Interview**

Applicant wishes to thank the Examiner for the telephone interview conducted on August 11, 2006. Examiner Hodges, Examiner Santiago, Alexei Erchak (Inventor), Robert Walat (Attorney for Applicant) and Caleb Franklin (In-House Counsel for Applicant) participated in the interview. In the interview, the rejections and prior art relied on in the Office Action including U.S. Patent No. 5,073,041 (Rastani) were discussed. Applicant commented that Rastani fails to teach or suggest a device that includes the following features: wherein the light emerging from the device is substantially incoherent; wherein the non-periodic pattern comprises holes being devoid of material within a perimeter defined by the first layer; wherein the non-periodic pattern comprises a plurality of non-concentric holes; and, wherein each layer between the light generating-region and the first layer is substantially non-reflective. Applicant discussed amending claim 56 and introducing new claims directed to these respective features. Applicant is responding to the Office Action consistent with the discussion in the interview.

#### **Double Patenting**

Claims 27, 32, 39, 45, 56 and 63 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 67 of U.S. Patent No. 6,831,302 in view of U.S. Patent Publication No. 2003/0141507 (Krames).

Claims 35-38, 40-44, 47-52 and 60 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over certain claims of U.S. Patent No. 6,831,302 in view of U.S. Patent Publication No. 2003/0141507 (Krames).

Claims 27, 32, 35-40 and 43 were rejected on the ground nonstatutory obviousness-type double patenting as being unpatentable over claim 21 of U.S. Patent Application No. 10/724,006, which recently issued as U.S. Patent No. 7,084,434, in view of Krames.

Claims 56 and 63 were rejected on the ground nonstatutory obviousness-type double patenting as being unpatentable over claim 28 of U.S. Patent Application No. 10/724,006, which recently issued as U.S. Patent No. 7,084,434, in view of Krames.

Claims 27, 32 and 38 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending U.S. Patent Application No. 10/724,029 in view of Krames.

Claims 39, 42, 45-52, 56, 60, 63 and 64 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over certain claims of copending U.S. Patent Application No. 10/724,029 in view of Krames.

To address these rejections without necessarily acceding to their correctness, Applicant is filing herewith terminal disclaimers in connection with U.S. Patent No. 6,831,302, U.S. Patent No. 7,084,434 and U.S. Patent Application Serial No. 10/724,029.

Accordingly, Applicant respectfully requests withdrawal of the claim rejections on this ground.

#### Rejection of Claims Under 35 U.S.C. §103

Claims 56, 60 and 63 were rejected under 35 U.S.C. §103(a) as being unpatentable over Rastani in view of Krames. The Office Action relies on Rastani to teach most of the features of the claim and asserts that it would have been obvious to modify the Rastani device to include a side dimension of 1 mm and for the extraction efficiency being independent of the edge length as taught by Krames.

Claim 56 has been amended to recite that the light emerging from the light emitting device via the surface of the first layer is substantially incoherent. As discussed in the interview, Rastani is directed to lasers which, as known to one of ordinary skill in the art, emit light that is substantially coherent. Therefore, even if one modified the Rastani device in view of Krames as suggested in the Office Action, the modified device would fail to emit light that is substantially

incoherent as recited in independent claim 56. Thus, each claim limitation is not taught or suggested by that combination.

Moreover, if the device of Rastani was modified to emit substantially incoherent light, such modification would render it unsuitable for its intended purpose – emission of laser light which is substantially coherent. Therefore, one of ordinary skill in the art would not have been motivated to make such modification (See MPEP §2143.01).

For at least these reasons, independent claim 56 is patentable in view of the combination of Rastani in view of Krames. Claims 63 and 64 depend from claim 56 and are, thus, also patentable.

Accordingly, Applicant respectfully requests withdrawal of the rejections on this ground.

#### New Claims

New claim 65 depends from independent claim 27 which is patentable over the cited reasons for reasons noted above and, thus, is also patentable.

New claims 66-74 depend from independent claim 56 which is patentable over the cited reasons for reasons noted above and, thus, are also patentable.

Independent claim 75 includes the recitations of claim 56 prior to this amendment and further recites that the non-periodic pattern comprises holes being devoid of material within a perimeter defined by the first layer. In contrast, the pattern in Rastani is formed of grooves having material within their perimeter. Therefore, even if one modified the Rastani device in view of Krames as suggested in the Office Action, the modified device would fail to include a non-periodic pattern comprising holes being devoid of material within a perimeter defined by the first layer as recited in claim 75. Thus, each claim limitation is not taught or suggested by that combination.

Moreover, one of ordinary skill in the art would not have been motivated to modify the pattern in Rastani to include the holes recited in claim 75. The grooves in Rastani appear to be an important aspect of the device which enables desired light emission. Accordingly, Rastani teaches away from such modification.

For at least these reasons, independent claim 75 is patentable in view of the combination of Rastani in view of Krames. Claims 76-83 depend from claim 75 and are, thus, also patentable.

Independent claim 84 includes the recitations of claim 56 prior to this amendment and further recites that the non-periodic pattern comprises a plurality of non-concentric holes. In contrast, the pattern in Rastani is formed of concentric grooves. Therefore, even if one modified the Rastani device in view of Krames as suggested in the Office Action, the modified device would fail to include a non-periodic pattern comprising a plurality of non-concentric holes as recited in claim 84. Thus, each claim limitation is not taught or suggested by that combination.

Moreover, one of ordinary skill in the art would not have been motivated to modify the pattern in Rastani to include such holes. As noted above, the concentric grooves in Rastani appear to be an important aspect of the device which enables desired light emission. Accordingly, Rastani teaches away from such modification.

For at least these reasons, independent claim 84 is patentable in view of the combination of Rastani in view of Krames. Claims 85-92 depend from claim 84 and are, thus, also patentable.

Independent claim 93 includes the recitations of claim 56 prior to this amendment and further recites that each layer between the light-generating region and the first layer is substantially non-reflective. In contrast, the Rastani devices includes a reflective layer (e.g., lower mirror 14, FIG. 1) between the light-generating region (active region, 10, FIG. 1) and the “first layer” (substrate 22, FIG. 1). Therefore, even if one modified the Rastani device in view of Krames as suggested in the Office Action, each layer between the light-generating region and the first layer of the modified device would not be substantially non-reflective as recited in claim 93. Thus, each claim limitation is not taught or suggested by that combination.

Moreover, one of ordinary skill in the art would not have been motivated to modify the Rastani device so that each layer between the light-generating region and the first layer of the modified device would be substantially non-reflective. The reflective layer (e.g., lower mirror 14) between the light-generating region and the first layer is important to enabling the Rastani device to function as a laser. Accordingly, Rastani teaches away from such modification.

For at least these reasons, independent claim 93 is patentable in view of the combination of Rastani in view of Krames. Claims 94-102 depend from claim 93 and are, thus, also patentable.

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Respectfully submitted,

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